

We claim:

1. A method of decreasing toxic metallic contaminants derived from a metallic electrode inserted in tissue, or cells suspended in a medium, undergoing treatment by electroporation, wherein said electroporation is carried out using electrodes within said tissue or within said medium comprising:
  - a) contacting said tissue or medium with electrodes selected from the group consisting of gold electrodes, gold plated electrodes, and gold alloy electrodes; and
  - b) charging said electrodes with an electric pulse capable of electroporating said tissue or cells.
2. A method according to claim 1 wherein said electrodes further comprise needles sufficient to penetrate said tissue.
3. A method according to claim 1 wherein said pulse is selected from a square pulse, a bipolar pulse, and a rectangular pulse.
4. A method according to claim 1 wherein the nominal field strength of said pulse is from 10 to 1500 V/cm.
5. A method according to claim 1 wherein the duration of the pulse is between 1 and 100 ms.
6. A method according to claim 1 wherein the frequency with which multiple pulses are applied is between 0.1 and 1000 Hz.
7. A method of electroporating polynucleotides in tissues of a subject and decreasing toxic metallic contaminants derived from a metallic electrode inserted in said tissue, wherein said electroporation comprises:
  - a) contacting said tissue with electrodes selected from the group consisting of gold electrodes, gold plated electrodes, and gold alloy electrodes; and
  - b) charging said electrodes with an electric pulse capable of electroporating said polynucleotides into cells of said tissue, said electric pulse having a nominal field strength of between 10-1500V/cm.